

# ArchiTECH

In-Wall Loudspeaker Products®

## KEVLAR SERIES

### **Mission Impossible**

Kevlar is an amazing fibrous material developed by two DuPont research scientists in 1965. The technology developed by Stephanie Kwolek and Herbert Blades proved to be stronger, more durable and lighter than any other material available. Kevlar is 5 times stronger than steel of the same weight.

These unique properties lend Kevlar to a wide variety of applications. As you may know, one of first and most well known applications is for bullet-resistant vests used by law enforcement as well as the military because of the superior bullet stopping power it provides without adding weight and restricting movement.

Products made with DuPont's Kevlar—from loudspeaker cones and protective apparel to automotive parts and ropes used on the Mars Pathfinder—do more, go farther, last longer, and do the impossible.





OEM SYSTEMS COMPANY products are recommended by professional audio/video system designers throughout North America.

All of the products in this brochure are manufactured in our ISO 9002 Registered Company Factory.

OEM stands for Original Equipment Manufacturing, which is the foundation of our business. It is the area we started in 17 years ago in Huntington Beach, California. The people of OEM have long histories in designing and manufacturing loudspeaker products for leading brand name corporations. Our innovative ideas, commitment to customer satisfaction, and a lot of hard work have allowed us to grow into the company you see today. Now operating out of Sparks, Nevada, we are proud of our products and ideals and are continuing to grow as a trusted and respected business.

Great designs and great materials are the two ingredients that go into great loudspeakers. Like so many other things, it is just that simple. Well-known brand name loudspeakers have one additional ingredient: advertising. OEM does not advertise. We pass this tremendous savings on to our customers and let the products speak for themselves.

Our speakers use a mix of classic, time-proven and new, cutting-edge technology & materials. Well-engineered crossover networks with premium quality components, together with attractive frame/baffle assemblies and solid mounting systems, yield loudspeaker performance-value ratios that are second to none.

We back our products with a Lifetime Limited Warranty and pride ourselves on always delivering 100% customer satisfaction. Thank you for taking the time to consider our products. We know you will be pleased with their quality and value.



#### SE-694 KE

5 1/2" long throw black Kevlar woofer with butyl surround and Phase Plug pole piece

1" pivoting textile soft dome tweeter  
12 dB/octave crossover  
Poly-switch overdrive protection

91 dB sensitivity  
Frequency Response: 50 Hz - 20,000Hz  
Power Handling: 40 watts nom. 80 watts max.  
8 Ohms  
Cut-out dimensions: 5 9/16" W x 8 1/4" H x 2 3/8" D  
Overall dimensions: 6 5/8" W x 9 1/4" H



#### SE-790 KE

6 1/2" long throw black Kevlar woofer with butyl surround and Phase Plug pole piece

1" pivoting textile soft dome tweeter  
12 dB/octave crossover  
Poly-switch overdrive protection  
IR knock-out

91 dB sensitivity  
Frequency Response: 45 Hz - 20,000 Hz  
Power Handling: 50 watts nom. 100 watts max.  
8 Ohms  
Cut-out dimensions: 7 3/8" W x 10 7/8" H x 3 1/8" D  
Overall dimensions: 8 5/8" W x 12 1/8" H



#### SE-892 KE

8" long throw black Kevlar woofer with butyl surround and Phase Plug pole piece

1" pivoting textile soft dome tweeter  
12 dB/octave crossover  
Poly-switch overdrive protection  
IR knock-out

91 dB sensitivity  
Frequency Response: 35 Hz - 20,000 Hz  
Power Handling: 60 watts nom. 120 watts max.  
8 Ohms  
Cut-out dimensions: 9" W x 13" H x 3 1/4" D  
Overall dimensions: 10 1/2" W x 14 1/2" H



#### SE-893 KE

8" long throw black Kevlar woofer with butyl surround and Phase Plug pole piece

1" pivoting textile soft dome tweeter  
1 1/2" textile soft dome midrange  
12 dB/octave crossover  
Poly-switch overdrive protection  
IR knock-out

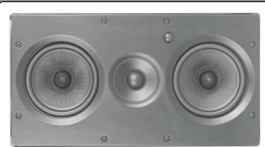
91 dB sensitivity  
Frequency Response: 35 Hz - 20,000 Hz  
Power Handling: 60 watts nom. 120 watts max.  
8 Ohms  
Cut-out dimensions: 9" W x 13" H x 3 1/4" D  
Overall dimensions: 10 1/2" W x 14 1/2" H



#### SE-LCR KE

*magnetically shielded*

Dual 5 1/4" long throw black Kevlar woofers with butyl surround and Phase Plug pole pieces



**5.1, 6.1 & 7.1 Home Theater Systems**  
suitable for *left center right* applications  
may be oriented **vertically** or **horizontally**

1" pivoting textile soft dome tweeter  
12 dB/octave crossover  
Poly-switch overdrive protection  
IR knock-out  
91 dB sensitivity  
Frequency Response: 45 Hz - 20,000 Hz  
Power Handling: 50 watts nom. 100 watts max.  
8 Ohms  
\*Sheetrock cut-out: 7 7/8" x 14 7/16" x 3 1/2" D  
Overall dimensions: 9" x 15 3/4"



#### SC-520 KE

5 1/4" black Kevlar woofer with butyl surround  
3/4" pivoting textile soft dome tweeter  
91 dB sensitivity  
12 dB/octave crossover  
Frequency Response: 50 Hz - 20,000Hz  
Power Handling: 30 watts nom. 60 watts max.  
8 Ohms  
Cut-out dimensions: 6 1/2" round 2 3/8" deep  
Overall dimensions: 7 1/2" round



#### SC-620 KE

6 1/2" black Kevlar woofer with butyl surround  
3/4" pivoting textile soft dome tweeter  
91 dB sensitivity  
12 dB/octave crossover  
Frequency Response: 45 Hz - 20,000 Hz  
Power Handling: 40 watts nom. 80 watts max.  
8 Ohms  
Cut-out dimensions: 7 3/8" round 2 7/8" deep  
Overall dimensions: 8 3/8" round



#### SC-820 KE

8" black Kevlar woofer with butyl surround  
1" pivoting textile soft dome tweeter  
91 dB sensitivity  
12 dB/octave crossover  
Frequency Response: 35 Hz - 20,000 Hz  
Power Handling: 50 watts nom. 100 watts max.  
8 Ohms  
Cut-out dimensions: 8 5/8" round 3 3/8" deep  
Overall dimensions: 9 3/4" round



#### SC-622 K Dual Voice Coil Single Point Stereo

6" black Kevlar woofer with butyl surround  
Dual (L+R) 3/4" dome tweeters  
91 dB sensitivity  
Frequency Response: 45 Hz - 20,000 Hz  
Power Handling: 40 watts nom. 80 watts max.  
8 Ohms  
Cut-out dimensions: 7 3/8" round 2 7/8" deep  
Overall dimensions: 8 3/8" round



#### SC-822 K Dual Voice Coil Single Point Stereo

8" black Kevlar woofer with butyl surround  
Dual (L+R) 3/4" dome tweeters  
91 dB sensitivity  
Frequency Response: 35 Hz - 20,000 Hz  
Power Handling: 50 watts nom. 100 watts max.  
8 Ohms  
Cut-out dimensions: 8 5/8" round 3 1/2" deep  
Overall dimensions: 9 3/4" round

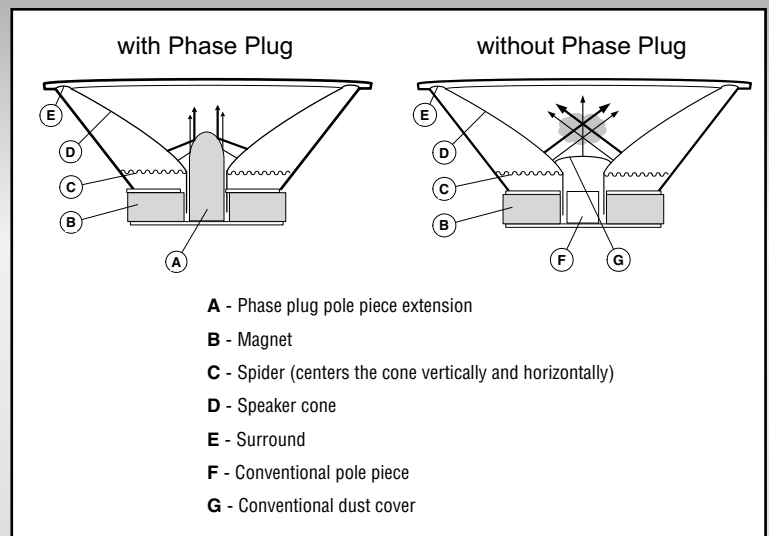
\*Horizontal mounting requires minimum 13 15/16" between studs

## Phase Plug Technology

In any conventional speaker, the highest frequencies of audio emanate from the area around the center of the cone and the lower frequencies are produced by the area of the cone that is farther from the center. In fact, the distance from the center at which a sound wave will come off of a speaker cone is directly related to its frequency. This helps explain why larger cone speakers are usually capable of producing more bass.

Due to the shape of the conventional speaker cone, the higher frequency sound waves tend to collide at a focal point. This causes phase distortion and a loss in efficiency. As a result, accuracy and transparency suffer. This also has detrimental effects on the realism of the artificial sound environments created by today's high fidelity digital audio and surround sound systems.

The phase plug pole piece extension improves driver performance and clarity by deflecting delicate mid range audio out to the listening environment thereby minimizing distortion producing collisions.



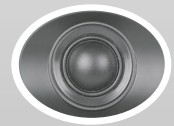
## Black Kevlar Woofers

The strength of Kevlar helps the cone retain its shape at very high energy levels and its low mass assures quick, accurate response. The cone's woven surface delivers smooth, uncolored mids. The kapton voice coil former and butyl rubber surround mean these woofers are designed for years of consistent, reliable audio enjoyment.



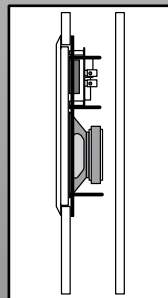
## Pivoting Textile Soft Dome Tweeters

In our experience with various tweeter diaphragm materials, we have determined that the textile soft dome most consistently delivers natural, uncolored high frequency audio. Ferro Fluid lubricates and cools the voice coil enabling high power handling. The pivoting feature allows the high frequency audio to be directed toward the main listening area. High frequency audio radiates from any speaker like the beam of a flashlight. This makes it necessary to aim the tweeter at the listening position to experience the full efficiency and detail that the speaker system is capable of delivering. These features work together to produce a seamless, transparent sound stage.



## Clamp-Ring Mounting

Our rectangular in-wall models utilize a clamp-ring mounting system which maximizes clamping surface. By distributing the clamping force over a larger surface area, the pressure on your sheet rock is reduced while the overall mounting strength is increased. The mounting ring comes pre-assembled to the speaker frame dramatically reducing installation time.



## IR Receiver Knockouts

The 6 1/2" and 8" rectangular in-wall speakers feature a mounting provision for a remote control signal receiver behind the speaker grille. This allows discrete integration with an infrared receiver/repeater system. These systems work with your standard IR remote controls to allow command of your entire system from any equipped room in your house.

